

**Amendments to the Claims:**

This following listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Cancelled)
2. (Cancelled)
3. (Currently amended) ~~An Apparatus as recited in claim 2 further impedance variation detector (IVD) design as part of an apparatus for routing a mobile phone incoming call to a connected land-line telephone, including a circuit design, the circuit design being arranged to include the IVD unit, the circuit design being arranged to detect resistance variation caused by lifting or hanging up the handset of land line communications apparatus in order to control supplying the approximately 11V DC power supply to the RTG through a mechanical relay (18). the apparatus comprising:~~  
  
an interface with a headphone outlet of the connected mobile phone to receive ringer and voice AC signals from said mobile phone as input;  
  
a RJ11 port arranged to be interfaced with a first cable, said first cable being arranged to be coupled to said land-line telephone in order to send a DC voltage sufficient to drive a ringer of said land-line telephone and to output an AC voltage for voice conversation;  
  
an approximately 110V AC power plug arranged to be connected to an approximately 110V AC power supply that is arranged to provide sufficient power to operate said apparatus;  
  
a power supply circuit to convert an approximately 110V AC current to an approximately 11V DC current;

a voltage drivers circuit arranged to split the approximately 11V DC current into an approximately 8V DC current and an approximately 11V DC current;

a ring tone generator (RTG) arranged to be interfaced to the headphone outlet of the connected mobile phone which, upon receiving an incoming call, outputs an approximately 3V AC signal, the approximately 3V AC signal being arranged to generate a series of high-low voltage cycles to drive the ringer of said land-line telephone; and

said IVD arranged to, upon detecting a line resistance variation caused by lifting or hanging-up telephone handset from the hook of said land-line telephone, switch the approximately 11V DC power to said RTG to silence the ringer of said land-line telephone or to prepare for the approximately 3V AC signal that is arranged to drive the ringer of said land-line telephone,

wherein the circuit said IVD design including comprising:

a high pass filter circuit that is configured to attenuate substantially low frequency signal in a human voice range, the high pass filter including at least one resistor-(45), at least one induction coil-(46), and at least one capacitor-(47);

a capacitor arrangement arranged to remove high frequency background noise;

a diode arrangement arranged to regulate a current direction and to compensate for a parasitic AC voltage; and

a differential amplifier (59)-arranged to drive a mechanical relay unit-(18).

4. (Currently amended) ~~An apparatus as recited in claim 2~~ The RTG design as part of the apparatus recited in claim 1, further including wherein the RTG includes a clock generator-(19) and a circuit design, the circuit design being arranged to provide the approximately 11V DC power supply to the clock generator upon detecting the

approximately 3V AC voice signal input from the connected mobile phone, the circuit design ~~including comprising~~:

a ring tone connecting device ~~(10) including~~ having an emitter diode ~~(71)~~ and a receiver diode ~~(73)~~ arranged to detect the approximately 3V AC signal input from said mobile phone;

a transistor arranged to compensate for a low frequency analog signal ~~(72)~~;

a diode ~~(74)~~ arranged to regulate a current direction;

a high frequency filtering capacitor ~~(75)~~;

a mechanical relay ~~(18)~~ that has a default ON state, the mechanical relay being arranged between the *IVD* and *RTG*, the mechanical relay including an inductor ~~(60a)~~ and approximately three terminals ~~(60b, 60c, and 60d)~~ that are arranged to switch off the approximately 11V DC power supply when the *IVD* detects a line resistance variation of the said land-line communication apparatus telephone; and

a voltage stabilizing zener diode arrangement and a MOSFET transistor ~~(78)~~ arranged to turn on a connection for the approximately 11V DC power supply through the mechanical ~~reply (18) relay~~ to the clock generator ~~(19)~~.

5. (Cancelled)

6. (Cancelled)